

Increasing the Global Competitiveness of the Twin Cities Metro Area

Draft for Board Discussion: June 19, 2013

Over one-half of all Minnesotans – 2.85 million people – live in the Twin Cities metropolitan area, one of the nation’s most vibrant economic regions. The metro’s competitive advantage has long been due to its highly educated workforce enabling an impressive concentration of large public and private corporations.

Eighteen Fortune 500 companies have their headquarters in the region, making the metro third in the country per capita. These firms, which generate over \$400 billion in revenue per year, span a variety of sectors, from financial services (U.S. Bancorp, Ameriprise

Financial, Thrivent Financial) and retail (Target, Supervalu, Best Buy) to consumer and industrial goods (General Mills, Land O’Lakes, 3M) and healthcare (UnitedHealth Group, Medtronic). The metro is also home to large private companies, led by Cargill and Carlson Companies, placing the region sixth in the nation on *Forbes*’ list of “Largest Private Companies.” Other companies, though not headquartered here, have significant employment centers in the region, including Wells Fargo, Delta and Boston Scientific.

“Minnesota’s achievement was in creating a well-educated, hard-working, easily trained, highly productive workforce that produces quality goods and services... Minnesota, as a successful economy, must avoid the tyranny of success if it is to be successful in the future.”

– State Demographer, *The Long Run Has Become the Short Run*, 2010

Metro area businesses are global – selling their products and services around the world. Over 76 percent of the metro area’s exports and export growth are concentrated in ten core industries including manufacturing, travel, professional and financial services, and they account for about \$18 billion in revenue a year. More than 177,000 jobs in the metro area depend on the region’s exports¹ which business leaders are striving to double over the next five years.

Businesses in the metro area, however, are struggling to find qualified employees. While education attainment in the region has grown, it has not kept pace with the rates of growth in

“Minnesota’s historical strengths in higher education give it an advantage, yet there is an urgent need to take strategic action and make investments to create a next level of excellence in Minnesota higher education: Future economic growth and prosperity will require deeper and more relevant skills from the workforce and increased innovation from researchers, entrepreneurs, and businesses. It is estimated that Minnesota jobs requiring post-secondary education will grow by nearly 8% from 2008 to 2018, while jobs requiring not more than a high school diploma will grow by only 3% over the same period. By 2018, 70% of Minnesota jobs will require post-secondary education.”

– “Higher Education Partnerships for Prosperity,” the Itasca Project, June 2012.

other metropolitan areas in the U.S. or in industrialized nations around the globe. The Twin Cities metro area now ranks eighth in the nation in the share of its population with a bachelor’s degree. The region’s economic vitality and competitiveness

increasingly will depend on its ability to draw upon an even more highly educated workforce – a workforce with the skills and capabilities needed for the Twin Cities metro area to compete globally. In the long run, the smaller the gap between the education of the workforce and the jobs

¹ Brookings-Rockefeller, “Project on State and Metropolitan Innovation,” March 2012.

that need to be filled, the more insulated a community is from the impact of economic downturns.² A rich and diverse pool of talented and creative college and university graduates is also key to reversing the state's decline in entrepreneurial activity over the past few decades.³

The urgent question we face is:

How is the Twin Cities metro area going to produce the number of graduates with associate, baccalaureate, and graduate degrees needed to ensure that it has the educated workforce required to remain competitive?

This plan identifies ways that Minnesota State Colleges and Universities could work together in new, creative ways, and in strategic partnership with metro area businesses to enable the Twin Cities metro area to compete globally by:

- Expanding degree opportunities to meet the growing needs of the Twin Cities metro area;
- Providing graduates with the capabilities needed for the jobs of the future;
- Delivering the highest value, most cost effective education available;
- Increasing access to baccalaureate education for the region's increasingly diverse communities.

The Growing Need for an Educated Workforce

The Twin Cities metro area will change dramatically over the decades ahead.

Twin Cities Metropolitan Area Projections of Population, Employment, and Needed Educational Credentials of Employees				
	2010	2020	2030	2040
Population	2,850,000	3,144,000	3,447,000	3,743,000
Employment	1,548,000	1,743,000	1,943,000	2,118,000
Incremental employment ¹		195,000	395,000	570,000
Incremental employees needed with post-secondary certificates and degrees ²		136,550	276,500	399,000
Incremental employees needed with baccalaureate degrees ²		68,250	138,250	199,500

Source for projected growth in population and employment: "Metro Stats," Metropolitan Council, April 2012, p. 1.

¹ Compared to 2010.

² Compared to 2010. Estimate assumes 70 percent of workforce requires some post-secondary education and 50 percent of those who require post-secondary education require a baccalaureate degree (based on projections from A. P. Carnevale, *et. al.*, *Help Wanted: Projections of Jobs and Education Requirements Through 2018*. Georgetown University Center on Education and the Workforce, 2010).

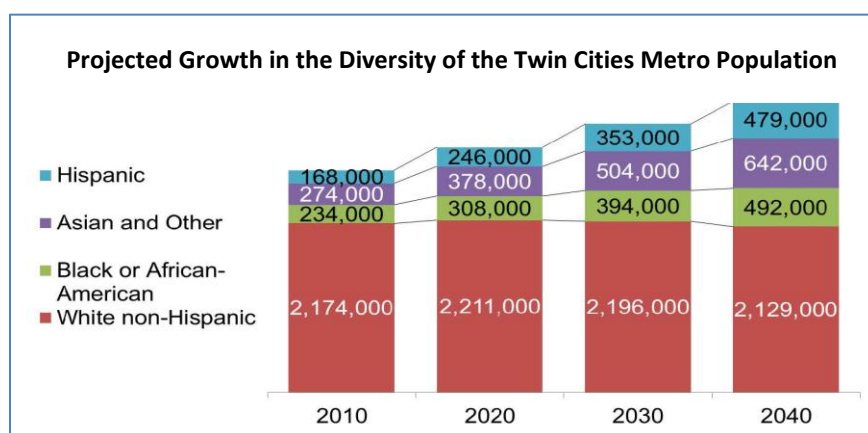
- Over the next three decades, **the metro's population will increase by nearly 1 million people creating an incremental 570,000 jobs.** Leading the nation in the demand for an educated workforce, 70 percent of all the jobs in Minnesota in 2018 will require some postsecondary education, with about half of those jobs requiring at least a baccalaureate

² Jonathan Rothwell, "Education, Job Openings, and Unemployment in Metropolitan America," The Brookings Institution, August 29, 2012.

³ Kauffman Foundation Index of Entrepreneurial Activity, 2007.

degree.⁴ This means that **399,000 of these incremental jobs in the metro area will need to be filled with employees who hold post-secondary certificates and degrees**, half of which will require a baccalaureate degree.⁵

- Beyond these incremental jobs, the retirement of the baby boom generation will create hundreds of thousands of vacancies that will need to be filled with new, highly skilled employees. Between 2009 and 2019 **retirements will create 392,810 vacant positions**.
- Even when the migration of graduates from greater Minnesota to the Twin Cities metro area is taken into account, by 2019, the metro area will experience **a shortfall of 58,060 workers with vocational certificates, associate's, or baccalaureate degrees**,⁶ and this shortfall will grow over the decades ahead, unless we act.
- The **diversity of the metro population will also continue to grow**. In fact, *all* of the projected population growth of the Twin Cities metro area will occur in minority populations with the white, non-Hispanic population actually declining over the decades ahead. By 2040, the Metropolitan Council projects that 43 percent of the metro population will be people of color as compared to 24 percent in 2010.



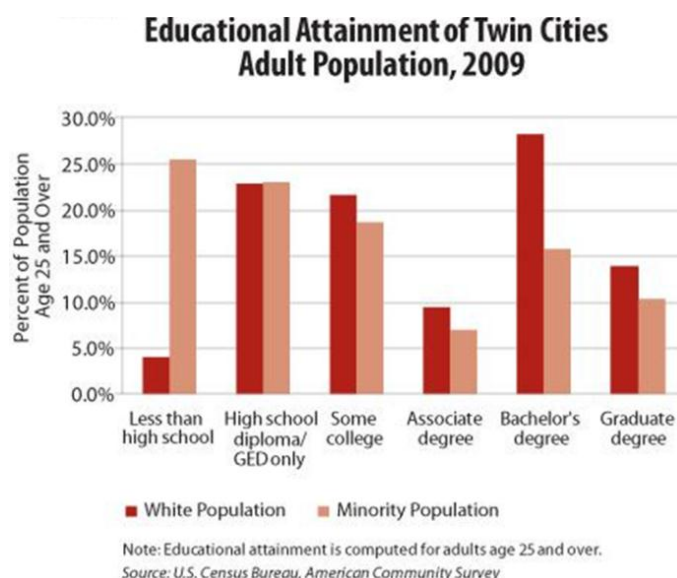
Source: Metropolitan Council, Thrive MSP Regional Forecasts, 2012

The challenge is that the region's fastest growing populations – people from communities of color – have traditionally been the least likely to participate in higher education. This gap in post-secondary credentials, particularly baccalaureate degree attainment, requires that we intervene in new ways that better serve those who have been underserved in the past. If we fail to act, we run the risk that a large portion of the people in the metro area will be unprepared for the jobs and professions that lie ahead. We run the risk that businesses across the metro will not have the workforce they need to grow and prosper.

⁴ A.P. Carnevale, *et. al.*, *Help Wanted: Projections of Jobs and Education Requirements Through 2018*. Georgetown University Center on Education and the Workforce, 2010.

⁵ These estimates do not account for migration of graduates either out of state or across regions within the state.

⁶ Analysis by Minnesota State Colleges and Universities Office of Research, Planning and Effectiveness.



The economic vitality of the Twin Cities metro area depends on the ability of our colleges and universities to produce substantially more graduates in the metro area's growth industries, particularly graduates with baccalaureate degrees. Minnesota State Colleges and Universities are committed to meeting this challenge.

MnSCU's Contributions to Providing an Educated Workforce

The Twin Cities metro area has a strong network of community and technical colleges that are committed to meeting the needs of employers for graduates with certificates and associate's degrees. These colleges are nimble and collaborate in the delivery of critical for-credit programs as well as customized training programs designed to ensure that incumbent employees stay at the leading edge of their professions.

During the 2011-12 academic year, MnSCU's metro area colleges served over 104,000 students. These colleges are the **primary gateway** for many students, particularly those from traditionally underserved communities, to begin their postsecondary experience, to pursue certificates and degrees that lead immediately to jobs, and to begin down the path to a baccalaureate degree. Fully 60 percent of MnSCU's metro area college students are from underrepresented student populations including 42 percent Pell eligible, 34 percent students of color, and 23 percent first generation.

The role of MnSCU's colleges and universities as the primary gateway to post-secondary education will be even more critical over the years ahead as more students than ever before will have to complete a post-secondary credential.

To meet the need for an increasingly educated workforce, enrollments in MnSCU's metro area colleges have grown over the past five years by 9,000 (FYE) students. Excluding Metropolitan State university, enrollments in MnSCU's metro-based university baccalaureate programs have not kept pace, growing by just over 750 students. ***There is an unmet need for baccalaureate education, a need that will continue to grow in the decades ahead unless we act.*** For-profit private universities have aggressively sought to fill some of the unmet need, but their high tuition (over four times that of a MnSCU university), student debt levels, and poor graduation rates do

not make them the best option for Minnesota students, particularly for students from communities that have traditionally been underserved by higher education. With the University of Minnesota (a) closing General College, (b) reducing the number of transfer students it accepts from MnSCU, and (c) focusing on students who graduate in the top 10 percent of their high school class and who can attend full-time, the University of Minnesota is not an option available to 90 percent of the metro's high school graduates. And, although the metro area has a rich portfolio of private colleges, many also focus on the top 10 percent of students and have tuition levels that are out of reach for most students.

As reported to the MnSCU Board of Trustees in 2009, "Demand for baccalaureate and graduate degrees is likely to grow even faster than the population numbers alone would indicate. Lack of a coordinated and aggressive system response, however, will limit affordable opportunities across the many fields of study that Minnesota State Colleges and Universities deliver for Minnesota's workforce." Metropolitan State University is part of the solution, but since its inception its mission has been to be "America's premier university for working adults."⁷ Fully 69 percent of Metro State's students are aged 25 or over compared to 34 percent of the students enrolled in baccalaureate programs in other Minnesota colleges and universities. It is important to serve working adults, but there are many other kinds of students who need to be served in the Twin Cities metro area, and this need will grow over the decades ahead.

The 2009 report to the Board also noted, "Because Metropolitan State is not able to meet all student and workforce needs that the system should address in the metro area, academic strengths in other state universities need to be part of the mix of programs offered in the region. . . . By utilizing the capacity of the non-metropolitan universities to supplement growing capacity at Metropolitan State University, the system will better match the region's higher education needs." For example, Metropolitan State University does not have academic programs in chemistry, cognitive science, biochemistry, physics, statistics, engineering (civil, composite, software, manufacturing, or mechanical), or world languages.

Bemidji State University; Minnesota State University, Mankato; Minnesota State University, Moorhead; and St. Cloud State University have contributed to meeting the growing baccalaureate needs in the Twin Cities metro area and have offered programs in the metro area often in partnership with individual MnSCU colleges. Over the past four years, baccalaureate enrollment (unduplicated headcount) in their metro-based programs grew 450 percent compared to 17 percent growth in baccalaureate enrollments at Metropolitan State University. Even with this increase, however, only 209 FYE students were enrolled in these non-Metropolitan State University baccalaureate programs in FY12.

Although progress has been made to meet student demand, **the current model falls short in several ways.** Through their partnerships with individual colleges, MnSCU universities provide those college students access to a limited number, rather than a broad set of programs needed to prepare for the range of jobs that will need to be filled over the decades ahead. Second, the patchwork quilt solution of creating modestly-sized programs, developed by a single university in partnership with a single college on a single site, is expensive and has resulted in some duplication of efforts. Most critically, the current approach is simply not scalable. We need a more systematic solution to meet the baccalaureate needs of the Twin Cities metro area – one

⁷ "President Sue K. Hammersmith, "Convocation Address," August 23, 2012.

that draws upon the strengths of all our college and university faculties. The need for baccalaureate degrees in the Twin Cities metropolitan region will continue to go unmet unless we create new ways to provide access to affordable baccalaureate options especially for populations of students who have historically not participated in higher education.

A Three-Part Strategy

To meet the Twin Cities metro area's needs for an educated workforce over the years ahead, we must significantly increase the opportunities for students to pursue and complete certificates as well as associate's and baccalaureate degrees. But, just more of what we already do is not enough. *We need to deliver education, particularly baccalaureate education, in bold new ways that will leverage the strengths, creativity, energy, and commitment of MnSCU's college and university faculty and staff to:*

- 1) meet the region's most critical workforce needs;**
- 2) deliver an extraordinary education that will support student success; and**
- 3) make it affordable and accessible to the metro area's diverse student populations.**

The sections that follow outline the key features of the proposed architecture for meeting the metro area's need for an educated workforce. The faculty, working collaboratively with college and university leaders and community partners, must be the ones to lead the design of the programs and courses that will make this vision a reality.

1. Partner with business and industry to prepare graduates for the high demand jobs and professions.

The priority for new investment should be in the fields where the demand in the metro area for an educated workforce is likely to be greatest over the years ahead. New investments would not replace existing programs, but would be in the fields where we will strive to increase the number of graduates, particularly graduates with baccalaureate degrees.

With a gross domestic product of \$200 billion, the Twin Cities metropolitan region has both traditional strengths in food production, agri-business, and financial services, as well as new strengths in technology sectors such as medical devices, health services, education and water quality. Analysis by McKinsey and Company on behalf of the Itasca Project identified a handful of key industry sectors in which the Twin Cities region already has significant strength in knowledge base, workforce quality, industry infrastructure, and research and that offer the top growth opportunities for the region. These are also the sectors where Greater MSP (the Minneapolis Saint Paul Regional Economic Development Partnership) is focusing its energy to recruit new businesses. These are the sectors where the demand for an educated workforce is likely to be greatest over the years ahead. These are the sectors where we should focus our energy and new resources, where we should invite faculty to develop the degree programs of the future, and where we should leverage the expertise that resides within MnSCU's Centers of Excellence.⁸

⁸ In healthcare education and delivery; information and communication technology; manufacturing and applied engineering; engineering and manufacturing excellence, agriculture, energy and transportation.

Growth Sectors and Occupations in the Twin Cities Metro Area

Growth Sector	Projected Growth Occupations	
	Certificates and Associate's Degrees	Baccalaureate Degrees
Health and Life Sciences: bio-tech industries, healthcare providers, healthcare payers and IT providers, and medical device companies. <i>The Twin Cities region has the second largest employment in the medical device industry in the country.</i>	<ul style="list-style-type: none"> • dental assistants • pharmacy technicians • licensed practical nurses • medical assistants • medical laboratory technicians 	<ul style="list-style-type: none"> • registered nurses • dental hygienists • medical and health service managers • bio-medical engineers
Business headquarters and business services: business administration, entrepreneurship and international businesses, creative and professional services, and data centers. <i>The metro area hosts the headquarters of 18 Fortune 500 companies.</i>	<ul style="list-style-type: none"> • information clerks • customer service representatives • administrative secretaries 	<ul style="list-style-type: none"> • general and operations managers • management analysts • sales managers • graphic designers • administrative services managers • marketing managers
Food and agribusiness: food processing and production, agrichemicals, and seed production. <i>Companies include General Mills, Land 'O Lakes, and Cargill, the world's largest privately held corporation.</i>	<ul style="list-style-type: none"> • mixing and blending machine setters • cargo and freight agents 	<ul style="list-style-type: none"> • chemical engineers • food scientists and technologists • general business occupations.
Information and communication technology: R&D centers, software and IT development. <i>The Twin Cities region is the 15th largest employment sector in the country for information technology cluster.</i>	<ul style="list-style-type: none"> • computer specialists and programmers 	<ul style="list-style-type: none"> • computer and information systems managers • computer engineers • IT management and administration • information and technology specialists
Advanced manufacturing and energy: engineering firms, precision manufacturing, automation, robotics, and traditional and renewable energy development. <i>The Twin Cities region is the 5th largest employer in electrical parts manufacturing in the country and the 7th and 8th largest in production technology and metal manufacturing, respectively.</i>	<ul style="list-style-type: none"> • civil engineering technicians • environmental science protection technicians • heating and air conditioning mechanics • computer-controlled machine tool operators 	<ul style="list-style-type: none"> • industrial engineers • cost estimators
Financial services and insurance: financial advisory, banking, and insurance. <i>The Twin Cities region is the 10th largest employment sector in the country for the financial services cluster.</i>	<ul style="list-style-type: none"> • claims adjusters and examiners • insurance agents, and tellers 	<ul style="list-style-type: none"> • accountants and auditors • financial managers • securities, commodities, financial services sales agents • financial analysts

Minnesota State Colleges and Universities are committed to collaborating with business and industry to prepare graduates for jobs and leadership in each of these key sectors.

2. Deliver an extraordinary education that will support student success

We need to create seamless pathways through an extraordinary education that will provide the technical and foundational skills needed to prepare graduates in a timely fashion for the jobs and

careers that will be in high demand. In designing the degree programs we have an opportunity to create an education that:

- Is more experientially based with students learning by doing.
- Is more multidisciplinary and applied, focusing on building the capacity of our graduates to solve real world problems.
- Prepares graduates to work globally – capable of working and communicating across geographic and cultural boundaries with ability to enable metro businesses to serve diverse populations and expand their reach into global markets.
- Utilizes innovative approaches to learning, including technologically facilitated online and blended courses.
- Brings together innovative faculty from across the system to create these degree programs.

The model for baccalaureate education must be more collaborative.

- Rather than each university developing its own baccalaureate degree program, MnSCU universities should collaborate to develop shared baccalaureate degree programs that can serve students across the entire metropolitan region.
- In contrast to having access to a limited portfolio of baccalaureate programs tied to a single college, students should be able to avail themselves the full portfolio of baccalaureate offerings.
- A single transfer curriculum should ensure that the metro colleges' lower division courses articulate with all universities' metro area baccalaureate programs so the pathways are seamless for all students.

Seamless pathways that enable students to complete their degrees in a timely fashion also mean that:

- We admit first-year students both to their college of choice and a university baccalaureate program. Students would automatically be able to continue their studies at the baccalaureate level when they successfully complete their lower division curriculum.
- College and university faculty collaborate to create four-year programs with the course work in metro area colleges articulating with the new university baccalaureate programs to create an integrated program that enables students to move from lower to upper division classes without the loss of credit or credits that do not meet upper division prerequisites.
- College and university academic advisors work together to create strong, continuous academic support of students during their college and the university years.
- We identify courses (delivered via PSEO, IB, AP or concurrent enrollment) that students could take while still in high school that would articulate to the college courses that contribute to a baccalaureate degree. The goal is to move students to completion of their degree in a timely, cost-effective, and appropriate pace for each student.
- We incorporate appropriate ways to assess prior learning and award course credit on the basis of what students have learned in other contexts.
- We increase completion rates and decrease time to degree so more students can begin their jobs and careers in a timely fashion.

3. Make baccalaureate programs affordable and accessible to the metro area's diverse student populations

MnSCU's nine two-year colleges distributed across the Twin Cities metro area provide 104,000 students access to the state's most affordable education. Tuition and fees at these MnSCU colleges is less than one-third the tuition and fees charged by private colleges.

Tuition and fees at Minnesota State Colleges and private two-year colleges

Minnesota State Colleges	\$5,355
Private two-year colleges	\$17,267

MnSCU's colleges not only provide the more affordable route, they also provide the route that leaves students with the least amount of debt. The average debt loads of graduates from for-profit colleges are nearly *three times* that of their MnSCU counterparts.

Education-load debt associate degree recipients in Minnesota, 2007-08

	% with <u>loans</u>	Median debt for those <u>with loans</u>	Median debt <u>for all grads</u>
MnSCU associate degree recipients	68%	\$11,000	\$ 7,480
Private, for-profit associate degree recipients	99%	\$22,000	\$21,780

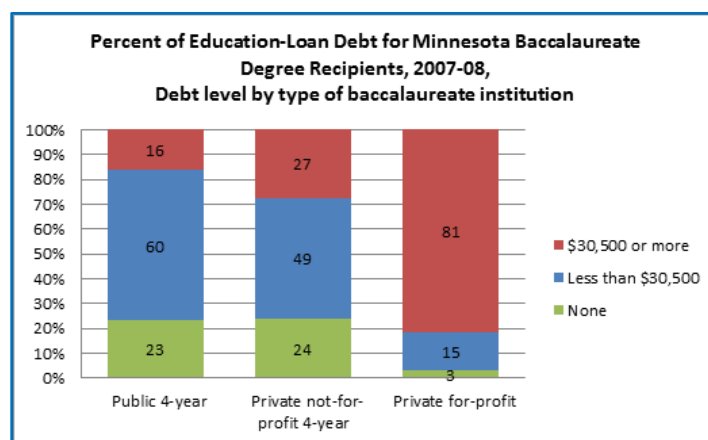
There are alternative routes to a baccalaureate degree in the Twin Cities metro area. The most cost-effective route, by far, is through MnSCU's colleges and universities. Students who take the first two years of their course work at a MnSCU college and then complete their baccalaureate degrees at a MnSCU university can do so for total of \$25,390 in tuition (Scenario I, next page). It is 44 percent more expensive to complete the baccalaureate degree at the University of Minnesota (Scenario III) and three times more expensive to complete the baccalaureate degree at a private college or university (Scenario V). The cost of enrolling all four years at the University of Minnesota (Scenario IV) or at a private college or university (Scenario VI) is substantially more expensive.

There is an even less expensive MnSCU route to a baccalaureate degree which entails beginning college-level work before completing high school. Eighty-three percent of all the Minnesota students who take part in Post-Secondary Education Opportunities (PSEO) program do so through a MnSCU college or university. Students who complete one year of college work through PSEO or a concurrent enrollment program can complete their baccalaureate degree through MnSCU institutions for \$20,101 (Scenario B). Students who complete two years of college credit before they finish high school can bring the cost of their baccalaureate degree down to \$14,630 (Scenario A).

The Price of Alternative Paths to a Baccalaureate Degree in 2012-2013

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Total Tuition</u>
Scenario A:	PSEO/concurrent enrollment	PSEO/concurrent enrollment	MnSCU university	MnSCU university	\$ 14,630
Scenario B:	PSEO/concurrent enrollment	MnSCU college	MnSCU university	MnSCU university	\$ 20,101
Scenario I:	MnSCU college	MnSCU college	MnSCU university	MnSCU university	\$ 25,390
Scenario II:	MnSCU university	MnSCU university	MnSCU university	MnSCU university	\$ 29,260
Scenario III:	MnSCU college	MnSCU college	University of Minnesota	University of Minnesota	\$ 36,472
Scenario IV:	University of Minnesota	University of Minnesota	University of Minnesota	University of Minnesota	\$ 51,524
Scenario V:	MnSCU college	MnSCU college	Private college or university	Private college or university	\$ 78,340
Scenario VI:	Private college or university	Private college or university	Private college or university	Private college or university	\$135,260

A MnSCU baccalaureate degree is not only the most affordable option, it is the route that leaves graduates with the least amount of debt. Just 16 percent of baccalaureate degree recipients from Minnesota public institutions have debt levels above \$30,500 upon graduation as compared to 27 percent of those who graduate from a private, non-profit college or university and 81 percent of those who graduate from a for-profit institution.



Source: National Postsecondary Student Aid Study

Not only does the MnSCU route to a baccalaureate degree provide the most affordable option, it is also the most accessible option. If not everyone can be in the top 10 percent of their graduating class, where are the other 90 percent of the students to go? The continued increase in selectivity of the University of Minnesota, as well as the ongoing selectivity of the private colleges, necessitates investment in baccalaureate options aimed at serving students who do not meet those restrictive admission requirements. Students who have potential to succeed must be prepared for the growing number of jobs that require post-secondary credentials.

Access means more than financial and academic access, it also means physical access to instruction, course materials, academic advisors, faculty, and technology. Baccalaureate programs must take into consideration that students increasingly hold jobs requiring them to work 30 to 40 or more hours a week. Through technology, the e-delivery of courses, as well as weekend and evening courses, students must connect with courses, instructional resources, faculty, and academic support at a time and place that works for them.

Implementation

1. Academic Centers

To achieve these goals, we should establish several academic centers in the Twin Cities metro area that will be easily accessible by public transportation. These centers should house technical support, academic advisors, career counselors, financial aid advisors, computer resources, and technologically sophisticated classrooms. Centers should not only provide space for face-to-face instruction, but also state-of-the-art technology for online, blended, and other technology-enhanced learning. Other than the fundamental expectation that centers should be directly accessible via public transportation, the location of the centers has yet to be determined. Centers should be located within geographic areas where there is strong student demand, which may include co-locating on or near existing colleges or university campuses/centers. By leasing space, we can move more quickly and have greater flexibility over the years ahead.

Several MnSCU colleges and universities already have established college-university partnerships, and it is important to note that these centers are not intended to replace any existing partnerships or limit future partnerships. Rather, centers are intended to (a) provide a convenient, high quality option for students, (b) meet unmet demand, and (c) meet future needs in the metro area in a cost effective manner.

All interested colleges and universities would be invited to participate in program development and offerings at the new sites. While the charge to create several centers sets the stage, development and implementation steps must be driven by faculty, students, campus leaders, and staff.

This plan does not supersede the need for Metropolitan State University. There will be a continuing need for the university to grow and thrive.

Naming/branding of centers has yet to be determined. However, the name selected should reflect broad system partnerships and not suggest affiliation with any individual college or university.

2. Academic Programming

The academic programs offered at these centers would focus on the six high growth areas identified by the Itasca Project as the high growth sectors in the metro area:

- health and life sciences
- business and business services
- food and agribusiness
- information and communication technology
- advanced manufacturing and energy
- financial services and insurance.

These new programs would be credit based and structured around a 2+2 model, with the lower division coursework provided by the system's two-year colleges (delivered on the college campus, at the centers, or online) and the upper-division coursework provided by the system's state universities (delivered at the centers or online). This is both the most cost-effective model for students and the one that best leverages the capacity and expertise of our faculties.

In each program area, the curriculum should be designed around a progressive credentialing model, starting at the certificate level and culminating with the bachelor's degree level. Certificates should articulate into an associate's degree, without loss of credit or momentum toward completion. Associate degrees should articulate into a bachelor's degree, again without loss of credit or momentum toward completion. Clear career pathways should be developed to ensure that there are viable career options for graduates after completing each level of education.

3. Curriculum Design Principles

Although faculty are responsible for designing courses and curriculum, the vision for this plan embodies several design principles:

- Business and industry advisory committees should be formed for each targeted area and be actively involved in identifying program outcomes and graduation competencies.
- Curriculum should be jointly developed by college and university faculty.
- Curriculum should be competency driven, with explicit outcomes for the overall degree program, as well as for each course. These outcomes should not only guide the development of the curriculum, but also facilitate the evaluation of prior learning and the awarding of credit for demonstrated competency developed in other contexts.
- An internship or apprenticeship to provide hands-on field experience should be included in each program.
- Curriculum design should include a deliberate focus on experiential, problem-based, or active learning, including active learning classroom activities and highly interactive online activities.
- Curriculum should be aligned with K-12 career and technical education (CTE) programming to ensure clear and consistent career pathways moving from high school into higher education.
- Given the dynamic growth in diverse populations in the metro area and the need for all students to be globally aware, curriculum development should be informed by an intentional emphasis on diversity and equity, integrating global awareness in general and different cultural perspectives in particular into both content and delivery strategies.

4. Student Support Services

Academic programs offered at the sites should be geared toward students of all ages and backgrounds: new entering students, returning students, transfer students, working adults, and recent high school graduates. Students without an associate's degree should be jointly admitted to a system college providing the lower division instruction and a system university providing

the upper division instruction. Students who have already earned an associate's degree should be admitted to a system university.

All students at these centers should have access to a full array of on-site student services, including advising, assessment, financial aid, registration/records office functions, business office functions, academic support, and career placement. Student services staffing should support all center institutions, not just one. This shared model would ensure that staff can serve all students, regardless of the student's home institution.

The service delivery model would emphasize success for underserved populations – students of color, first generation students, and students from families of modest financial means – building on national best practices for supporting students and reducing achievement gaps. Instructional innovations like learning communities and supplemental instruction should also be deployed along with support services like intrusive advising, early alerts, and the like.

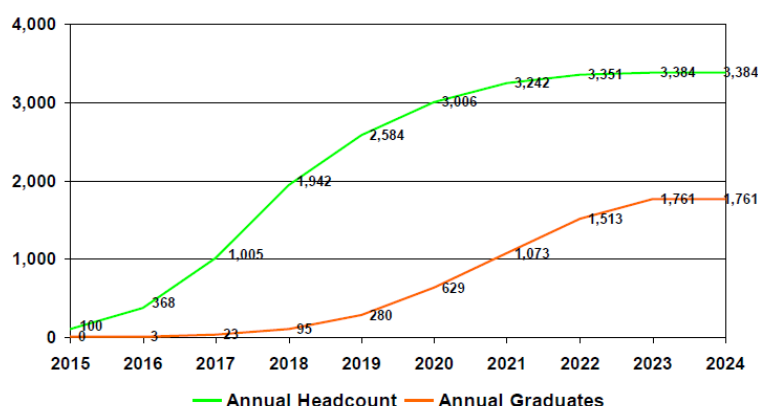
The structures and learning environments must welcome and support students of color. Establishing a culturally-sensitive, welcoming environment for people of color that promotes student success should be paramount to the success of the centers. As new enterprises, the centers have an opportunity to establish environments in which there are not disparities in achievement base on race. This should require considerable input from leaders in communities of color, feedback from current students, and consultation with campus personnel as the system designs the centers.

In addition, the centers should be staffed with diverse faculty, staff and administrators who are culturally competent and committed to educational equity. Materials, processes and messaging used in recruitment, marketing and the application for admission will be welcoming and accommodating to communities of color. Processes for assessment testing, orientation, transfer and academic advising should be culturally sensitive to the needs of students of color and accurately assess their college readiness and potential for success. Educational programs, curricula and instructional methodologies should reflect the life experiences of a diverse population of students.

5. Projected Enrollments

With new academic programs fully implemented, MnSCU would be able to serve an incremental 3,384 students per year in the metro area and produce an incremental 1,761 baccalaureate degrees per year, doubling the number of baccalaureate credentials awarded each year in the metro area by MnSCU universities.

Incremental Metro Area Baccalaureate Enrollments and Graduates: FY 2015 to 2024



6. Marketing

An aggressive marketing plan would need to be developed to coincide with the opening of the first center; marketing-as-usual would not be sufficient. The marketing plan should include decisions about branding and naming.

7. Possible Additional Opportunities for Collaboration

In addition to the academic programs and student services outlined above, the centers should provide the opportunity for additional collaboration that would benefit students and provide a more efficient delivery of services currently provided on each campus:

- Assessment:** Assessment centers could be established at each site to provide incoming student placement testing and post-assessment advising, as well as exam proctoring for online classes. Ideally, this resource could serve the entire metro area and campuses could eliminate this function on each campus.
- Credit for prior learning:** The centers create a new opportunity for expanding the system's capability for awarding credit for prior learning in a way that maintains high academic integrity and creates opportunity for students to start or restart their academic career. Credit for prior learning evaluation centers could be established at each site, where prior learning could be assessed and equated to coursework across all metro institutions. By centralizing this function, students would be able to determine how their prior learning would apply toward any and all of the degrees offered within the system.

Conclusion

The Twin Cities metro area faces an immediate and growing shortage of the graduates it needs to compete globally. Businesses are struggling to find qualified employees, and demographic trends point to the problem intensifying over the years ahead. Failure to act not only puts the economic vitality of the region at risk; it threatens the ability of many of our citizens to secure jobs that pay well enough to enable them to support themselves and their families.

Minnesota State Colleges and Universities are prepared to act, and we are prepared to act in bold, new strategic ways to deliver education, particularly baccalaureate education, in ways that will build on our historic strengths and prepare us for a dynamically changing future.

By working together to expand opportunities for affordable, accessible post-secondary education, these new academic centers could prepare Twin Cities metro students for careers in high demand, growth sectors and secure the future economic health of the region and our state for years to come.